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AUTHOR	Corrigan, Robert E.; Wood, R. Ronald
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ABSTRACT

A management plan developed for the district-wide coordination of vocational education program planning in the State Center Community College District, California, is presented. Following a discussion of the planning process (in memo form) and a section on how to read flow-block diagrams, the mission profile and narrative description of this model are provided. Major functions include the following components: define vocational education missions, goals, objectives at the district level; identify Fresno City College vocational education administrative objectives and performance requirements; define functions performed at the district level; define functions performed by each institution; identify SCCCD vocational education mandates; derive data required for vocational education programs; identify vertical horizontal discrepancies; identify revisions strategies; define program decision-making steps for program commitments; identify vocational education program articulation/coordination; identify qualifications of each institution for program responsibility; select institution(s) responsible for program design; develop specific program plans for approval; assure feasibility of required resources to implement programs; obtain required approvals for program implementation; develop and implement management; coordinate and evaluate sub-systems. (JH)

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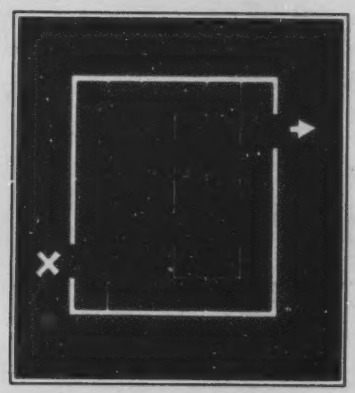
"Project: MOBILITY"

A Federally Funded Research and Design Project
for
Disadvantaged and Handicapped Vocational Education Students
(Grant #G007603888)

THE FOLLOWING IS A MANAGEMENT PLAN
DEVELOPED FOR THE
DISTRICT-WIDE COORDINATION OF VOCATIONAL EDUCATION



Long Range Planning Process

Management Plans

Developed By:

Dr. Robert E. Corrigan

Dr. R. Ronald Wood

Project Director

Mr. Richard Handley
Associate Dean of Instruction
for Occupational Education

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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August 1977

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RESEARCH AND DESIGN PROJECT

MANAGEMENT PLANS

INTRODUCTION

In implementing this project, a systematic process of program planning, management and evaluation was applied. The management plan presented in this booklet is a product of that process.

The following pages present the postulates upon which we based our management planning. Also presented is the generic model that was applied in all planning. A review of these materials will give an insight into our philosophy of program planning, management and evaluation. It will also detail the steps taken to complete this management plan.

Let us start with the underlying postulate that an immediate requirement exists for better program planning/management and evaluation processes. It is proposed that this postulate is valid based on the events occurring in the "real world" which are affecting the image, role and proposed accountability requirements set for educational institutions and programs.

As a second postulate, let us assume that the criteria of program accountability (success) must ultimately be expressed and evaluated solely in terms of measurable performance standards.

As a third postulate, let us establish that planning, management and evaluation commitments are only as good as their ability to predictably achieve all performance standards defining successful performance for any given program.

A fourth postulate to be established is that we cannot begin to define reasonable performance standards until we have committed ourselves to a definitive program objective(s). These program objectives must:

1. communicate clearly our intent or purpose,
2. specify in concise terms what we intend to achieve, and with what and,
3. state the measurable performance specifications that answer how well we must perform and/or produce "end-products" and under what conditions.

A fifth postulate to be established is that effective and efficient program management requires an orderly, or systematic, planning, management and evaluation process. This process must include the following:

1. The assurance that all relevant data required for valid decision-making are derived and considered.
2. The capability to analyze data in such a manner as to be assured the highest probability of deriving and making correct decisions based on valid decision-making criteria.
3. The assurance that minimum risk and maximum potential gain can be clearly established and documented when making decisions.
4. The assurance that a capability exists for sensing errors in the execution of the program decision-making and implementation process.
5. The assurance that a capability exists for revision or correction of errors in time to make valid and reliable mid-course program corrections.
6. The capability exists for recording and communicating all successive analysis, planning and implementation steps.
7. The assurance that an analysis process exists which provides for

the detection of bias in the criteria of decision-making and the capability to eliminate this bias from the decision-making process.

8. The capability exists to compare and select from alternatives that solution strategy which presents the most cost-effective strategy for achieving the objectives of the program.

All of the postulates identified are valid and required for effective and efficient program planning, management and evaluation.

On the following page, you are provided with an 8½" x 11" model depicting all of the steps that a program must perform and the sequence in which they must be performed to design and implement a planning, management and evaluation process which satisfies all of the postulates identified in the previous section.

To read the model, you would proceed from left to right. The first column on the left identifies the step number (A = Analysis and S = Synthesis). The second column lists the question(s) you are asking at that step. The third column contained in the hourglass figure, lists the action(s) which must be taken to answer the question(s) asked in the second column. The fourth column identifies the products which are produced as a result of performing the actions listed in the hourglass figure. The dotted lines with arrows at the left-hand side of the hourglass figure represent the feedback process, discussed in the previous section, which continually requires checks for internal consistency and demonstrated feasibility prior to proceeding in the PME process.

This model also presents the process that was used to develop all of the management plans in this Research and Design Project including the one contained in this booklet.

MODEL OF A SYSTEM APPROACH FOR EFFECTIVENESS (SAFE)

SYSTEM ANALYSIS STEPS	SYSTEM QUESTIONS ASKED	SAFE STEPS & TOOLS	SYSTEM OUTPUTS OR PRODUCTS
		SYSTEM ANALYSIS	**SYSTEM ANALYSIS**
A-1	(A) WHAT ARE THE RELEVANT NEEDS TO BE RESOLVED? (B) WHAT ARE RELEVANT PROBLEMS TO BE SOLVED TO RESOLVE NEEDS?	ASSESS NEEDS & PROBLEMS	A-1 STATED PRIORITY NEEDS & PROBLEM STATEMENTS
A-2	WHAT ARE OUR INTENTS TO ACHIEVE?	DEFINE GOALS	A-2 PRIORITY GOALS DERIVED FROM NEEDS
A-3	WHAT IS OUR EXACT PERFORMANCE COMMITMENT FOR END ACHIEVEMENT?	STATE MISSION OBJECTIVE	A-3 PRIORITY MISSION (PROGRAM) OBJECTIVES SPECIFIC TO STATED GOALS & NEEDS
A-4	WHAT ARE WE TRYING TO ACCOMPLISH-AND-HOW WILL WE KNOW WE HAVE ARRIVED SUCCESSFULLY?	DETERMINE MISSION PERFORMANCE REQ'TS	A-4 MEASUREMENT CRITERIA DEFINING PROGRAM OR MISSION OUTPUT OR PRODUCT
A-5	WHAT ARE THE HURDLES WHICH CAN STOP US? HOW DO WE NEUTRALIZE THEM?	DETERMINE MISSION CONSTRAINTS	A-5 NEGATIVE FORCES TO BE RECONCILED (PROGRAM CONSTRAINTS)
A-6	WHAT ARE THE MAJOR EVENTS OR "MILESTONES" TO BE ACCOMPLISHED TO ACHIEVE OUR PERFORMANCE COMMITMENT?	DERIVE MISSION PROFILE (RC*)	A-6 GROSS "MILESTONES" OR EVENTS TO BE ACHIEVED IN SEQUENCE TO PRODUCE PROGRAM PRODUCT OR OUTPUT & REDUCE CONSTRAINTS
A-7	WHAT ARE SUB-ACTIVITIES TO BE ACCOMPLISHED TO PERFORM EACH MILESTONE?	PERFORM FUNCTION ANALYSIS (RC*)	A-7 SUBFUNCTIONS TO PERFORM EACH GROSS MILESTONE
A-8	WHAT ARE THE SPECIFIC TASKS TO BE ACCOMPLISHED FOR EACH SUB-ACTIVITY	PERFORM TASK ANALYSIS (RC*)	A-8 TASKS TO BE PERFORMED FOR EACH SUBFUNCTION
A-9	WHAT ARE THE FEASIBLE WAYS AND MEANS TO PERFORM REQUIRED TASKS & FUNCTIONS?	PERFORM METHODS/MEANS ANALYSIS (RC*)	A-9 ALTERNATE METHOD/MEANS WHICH ARE FEASIBLE "WAYS & MEANS" TO PERFORM TASKS & FUNCTIONS
A-10	IS IT FEASIBLE TO PROCEED?	STATE FEASIBILITY GO-NO GO	A-10 FINAL DATA INDICATING FEASIBILITY TO PROCEED OR NOT
		SYSTEM SYNTHESIS	**SYSTEM SYNTHESIS**
S-1	WHAT ARE VARIOUS "WAYS" FOR ACHIEVING ALL THE WHATS?	IDENTIFY ALTERNATE (FEASIBLE) SOLUTION PLANS	S-1 ALTERNATE CONFIGURATIONS FOR "WAYS & MEANS" TO GIVE BEST RESULTS
S-2	WHO WILL DO WHAT? WITH WHAT MEANS? HOW WILL ALL WHATS BE SCHEDULED?	DESIGN ALTERNATE SOLUTION PLANS FOR IMPLEMENTATION (RC*)	S-2 DETAILED PLANS FOR EACH ALTERNATE: SCHEDULE, PERSONNEL, TIMES, METHOD-MEANS, COSTS, BUDGETS, EVALUATION, (PPBES) MGMT-OPERATION-SUPPORT EQPMT
S-3	WHAT ARE THE MOST EFFICIENT "WAYS AND MEANS" TO PERFORM ALL THE WHATS?	ASSESS ALTERNATE SOLUTION PLANS FOR COSTS & EFFECTIVENESS CRITERIA (RC*)	S-3 DATA COMPARING ALTERNATIVE PLANS FOR COSTS-EFFICIENCY-EFFECTIVENESS-BENEFITS
S-4	WHAT IS THE BEST SOLUTION PLAN?	SELECT MOST COST-EFFECTIVE PLAN FOR IMPLEMENTATION	S-4 OPTIMAL IMPLEMENTATION PLAN-AND-PROGRAM DESCRIPTIVE PACKAGE
S-5	HOW DO SELECTED METHODS/MEANS/MEDIA WORK?	FIELD TEST OR VALIDATE SELECTED METHOD-MEANS COMBINATION WHERE REQD	S-5 PERFORMANCE DATA INDICATING PREDICTION OF METHODS-MEANS-MEDIA (USE CURRICULUM)
S-6	HOW DO WE PUT THE SOLUTION PLAN TO WORK?	IMPLEMENT SOLUTION PLAN	S-6 DETAILED PLANS FOR SENSING, CORRECTING, EVALUATING, COMMUNICATING FOR OPERATIONS-MGMT-PRODUCTS
S-7	HOW DOES THE PLAN PERFORM?	EVALUATE SYSTEM PERFORMANCE (BOTH PROCESS & PRODUCT)	S-7 DETAILED PERFORMANCE DATA ±: PRODUCT ACHIEVEMENT, - PROCESSES - BUDGETS
S-8	WHAT REVISIONS ARE REQUIRED?	REVISE SYSTEM FOR REQUIRED ACHIEVEMENT	S-8 RECOMMENDED CHANGES IN SYSTEM PLANNING-DESIGN-IMPLEMENTATION

SYSTEM ANALYSIS — WHATS

SYSTEM SYNTHESIS — HOW TO's

SYSTEM ANALYSIS — SYSTEM SYNTHESIS

* DETERMINE NEW PERFORMANCE REQUIREMENTS & CONSTRAINTS

R E Corrigan Associates
P.O. Box 5019
Anaheim California 92804

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TO: Mr. Jack Hanson and members of Ad Hoc Voc. Ed. Planning Committee, State Center Community College District, Fresno, California

FROM: Drs. R. E. Corrigan and Ron Wood, Consultants

SUBJECT: Discussion draft of long-range coordinated process for vocational education program planning.

The following document presents to members of the Ad Hoc Committee the discussion draft of a long-range coordinated process model for vocational education program planning in the State Center Community College District. It is presented for initial review by individual committee members to identify recommended revisions or expansions.

As presented, the planning process model represents: 1) the consultants' response to individual interviews with committee members, and 2) the planning products to be delivered specific to the seven (7) performance requirements agreed upon by the Ad Hoc Committee in March 1977.

Indepth personal interviews with individual committee members established additional design requirements beyond those agreed upon by the Ad Hoc Committee in March 1977. These new design requirements reflect the following committee inputs:

1. The planning process reflects long-range requirements for standardization in the quality of services and vocational education programs for all participating institutions/agencies within the District specific to teaching graduation, placement, and follow-up of students.

2. The planning process should be responsive to the unique missions of each of the individual institutions when establishing program priorities for implementation.

3. The planning process should reflect the District as a "total system" with the criteria of cooperation and partnership among the participating institutions as the critical referents when defining the functional service requirements to be provided by the District as a whole.

It is proposed, therefore, that in order to satisfy the full range of requirements forthe future, the coordinated, long-range planning process should display the following characteristics:

a. Be simple,

b. Be rational,

c. Be politically responsive to unity requirements among all participating agencies,

d. Be a coalescing process leading to real collaboration between and among agencies while remaining responsive to legal requirements (District, State, regional and federal),

e. Be responsive to the shifting student population characteristics and needs with the impact on support in program implementation remaining consistent with financial regulations and requirements,

f. Be responsive to the requirements for quality vocational education program design and delivery specific to the changing characteristics and needs of students being served.

Consistent with the data obtained from interviews, the consultants present for review and approval the following operational definitions of the terms included in the Project Mission Objective:

Long-Range: an on-going process of revision based on current and projected changing needs in the system to maintain maximum effectiveness and efficiency.

Coordinated Process: a series of process steps performed in program planning and decision-making involving every agency within SCCCD (District level, Fresno C C, Reedley, VTC, etc.) leading to collaboratively derived program commitments, implementation plans, (long-range) evaluation and revision requirements.

Vocational Education Program Planning Process: those steps involved in achieving:

a. vocational education program commitments from each SCCCD institution specific to district-wide institutional needs and legal mandates.

b. program design, management and implementation steps for selected vocational education programs providing students with quality-assured (mastery) competencies leading toward successful employment.

c. program evaluation and revision steps performed in response to:

   1. required minimum mastery skills for gainful employment.

   2. new program requirements derived from changing district/institutional needs relative to employment opportunities.

d. 1) a decision-making process, and 2) criteria, which will allow collaboration and articulation involving (as appropriate): the District Office, Fresno City College, Reedly College, Vocational Training Center, State Center Regional Adult Vocational Education (RAVE) Council, San Joanquin Valley Community College Council for Occupational Education, California Community Colleges Chancellor's Office, and the Post Secondary Education Commission. This process will assure: 1) the selection of highest priority programs and 2) their implementation consistent with maximum cost-benefits to SCCCD.

Planning: those analysis and assessment activities performed by managers at every level within an organization prior to the allocation of resources program implementation in order to:

a. identify the most relevant outcomes or products to be achieved,

b. develop detailed plans of action for feasibly producing those outcomes or products; and

c. assume maximally controlled achievement of established outcomes or products with the most cost-effective use of limited resources.

Management: those leadership and decision-making activities performed by managers at every level within an organization to continuously monitor, control and evaluate the preplanned achievement of operation requirements and support activities which lead to the predictable accomplishment of pre-established outcomes (objectives).

Evaluation: those measurement, monitoring and revision activities performed both during and at the end of program implementation to assure achievement of the preestablished program outcomes (objectives) defined for the total organization and for every level within the organization.

Efficient: how well the organization utilizes resources (time, money, personnel, facilities, etc.) while performing operations to achieve the desired outcomes (objectives).

Effective: the quality of the completed products or outcomes of the total organization; i.e. the ability of the organization to achieve its pre-committed objectives.

A review of the above proposed operational definitions extends the scope of planning to include not only the initial program commitments, but also those management and evaluation process steps which lead toward assured results specific to a) the student programs offered in each institution, b) only those

priority vocational offerings promising employment opportunities, and c) continuous assessment of changing vocational program requirements in response to emerging employment/ student needs.

An analysis of the performance requirements established by the Ad Hoc Committee in March 1977 appears to focus on 1) decision-making processes for the selection and assignment of programs in vocational/occupational education, and 2) their successful implementation leading to student job placement. The operational definition of "program" is presented as follows:

Program: course or courses of instruction/learning providing required mastery competencies leading to successful gainful employment.

To accomplish the intent of the performance requirements, the planning process has been designed to answer the following significant questions:

1. What programs are to be considered?
2. Why are these programs to be considered? (Needs?)
3. What resources are required to implement alternative priority programs?
4. What programs can be feasibly implemented (given existing or predicted financial resources)?
5. What agencies are to be involved in program selection/assignment?
6. Why should such agencies be involved.

7. What are the given regulations, mandates (Federal, State, regional, local) defining program assignments?

8. What are the criteria (data) for assigning programs?

9. Who is to have what authority in program implementation?

10. How will selected programs contribute to the achievement of regional, district, and institutional missions and objectives?

11. What criteria will be used among and between the institutions for:

    - approving
    - continuing
    - eliminating
    - expanding
    - revising
    - duplicating

    vocational education programs?

12. What necessary program articulation requirements are to be considered between High School, Adult Education and Post Secondary?

13. What are the roles of the representative committees (RAVE, etc.) in meeting articulation requirements for vocational education programs?

14. What are the management relationships between district/institutions?

15. What are the process steps to be performed in assuring the quality delivery of mastery competencies leading to gainful student employment?

16. What process steps are required to assure long-term alignment of program priorities.

From the data obtained through the interviews, the consultants propose a revision in the mission objective and the inclusion of additional performance requirements. The revised mission objective and extended performance requirements are presented below.

Revised Mission Objective:

By , 1977, the consulting teams will have delivered to the State Center Community College District (SCCCD) a planning process model* which, if implemented by the District, will establish a long-range,* coordinated process* of vocational education program* planning,* management,* and evaluation* specific to the achievement of the stated performance requirements to follow.

The planning product(s) to be delivered will include two major components: 1) (a) flow chart(s) and descriptive narrative of the recommended steps to be taken by SCCCD to achieve the given mission objective and performance requirements; and 2) a management/implementation plan for the products to be delivered in number 1 above.

Performance Requirements:

Performance Requirements one (1) through seven (7) are those agreed upon by the Ad Hoc Committee in March of 1977.

During the interviews, certain Ad Hoc committee members expressed several other areas of concern which they thought desirable to include in the decision-making model. The consultants have added these elements as Performance Requirements related to the Process Design, and are listed as numbers eight (8) through eleven (11).

Performance Requirements:

By May 27, 1977, the consulting team will deliver a) product(s) which include(s) subplans which, if implemented by the District, will lead to the accomplishment of the following:

1. The identification of the objectives, functions, and responsibilities of the SCCCD Vocational Training Center. The subplan will provide the process for specifying the interrelationship among the objectives of the VTC with those of Fresno City and Reedley Colleges (in place of original performance requirement #5).

2. The establishment of mutually agreed-upon standardized criteria which can be used as the basis for SCCCD decision making in such areas as program planning, expansion, reduction, approval, continuation, etc. (in place of original performance requirement #8).

3. The vertical and horizontal curricular articulation with appropriate educational agencies/entities. The subplan will provide for vertical curricular articulation with appropriate high school districts, California State University at Fresno, and the SCCCD Vocational Training Center. Horizontal articulation will be provided for Fresno City College, Reedley College, SCCCD Vocational Council for Occupational Education. The above subplan(s) will satisfy all appropriate RAVE Council requirements (in place of original performance requirement #4).

4. The identification of appropriate domains of decision making. The subplan will identify the process whereby decision-making criteria and strategies are derived and used to place given decisions into one of the following four domains:

   a. locally autonomous decisions involving only one of three SCCCD campuses/sites.

   b. decisions requiring cooperation between two of the three SCCCD campuses/sites.

   c. decisions requiring cooperation among all three of the SCCCD campuses/sites.

   d. decisions requiring District coordination and approval.

   The subplan will provide steps which, if followed, would reduce or eliminate potential conflict about what decisions fall into which of the above four categories (domains) (in place of original performance requirement #10).

5. The identification and elimination of unnecessary duplication of vocational education programs within the District. The subplan, if implemented, will enable appropriate District personnel to determine the criteria and strategies to eliminate and avoid unnecessary vocational education program duplication (in place of original performance requirements #'s 6 & 7).

6. The coordinated allocation of categorical vocational education funds. This subplan, if implemented, will enable SCCCD personnel to identify the required decision-making criteria and methods-means for the coordinated procurement and allocation of vocational education funds (in place of original performance requirement #2).

7. The establishment of a decision-making process which will increase the likelihood of a unified SCCCD personnel vote when seeking vocational education program approval from the following: 1) State Center Regional Adult Vocational Education Council, 2) San Joaquin Valley Community College Council for Occupational Education, 3) California Community Colleges Chancellor's Office, and 4) The Post Secondary Education Commission (in place of original performance requirement #9).

The original performance requirements 1 and 3 have been subsumed in the mission objective.

The following lists the additional Performance Requirements developed (8-11) in response to the data obtained from those interviewed.

Additional Performance Requirements: (Process design)

8. The planning, management and evaluation sub-system establish an objective, empirically-based process of decision-making based on documented needs.

9. A district-wide system planning model will be developed with institutional needs, goals and objectives subordinate to and consistent with district-level needs, goals, objectives, and mandates.

10. The established planning model will include these steps required in the design, delivery and evaluation of quality-assured educational programs and services specific to priority student and employment needs which are defined in performance (mastery) terms (criteria).

11. The planning model will identify the required process steps to establish effectiveness and efficiency criteria as the basis for program assignment, continuation, expansion, reduction, deletion consistent with the established need for each program.

Before presenting the mission profile of major functions in the proposed planning model, the consultants have included two pages of material developed by Dr. Corrigan which explains how to read function flow-block-diagrams. This material is included so that members of the committee may correctly understand the relationships between and among the functions presented in the mission profile and the individual breakouts of these function.

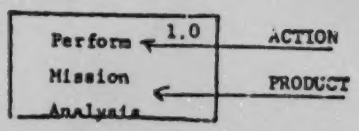
SPECIAL NOTE

Due to production limitations, this plan will be presented in outline form rather than as functional flow block diagrams.

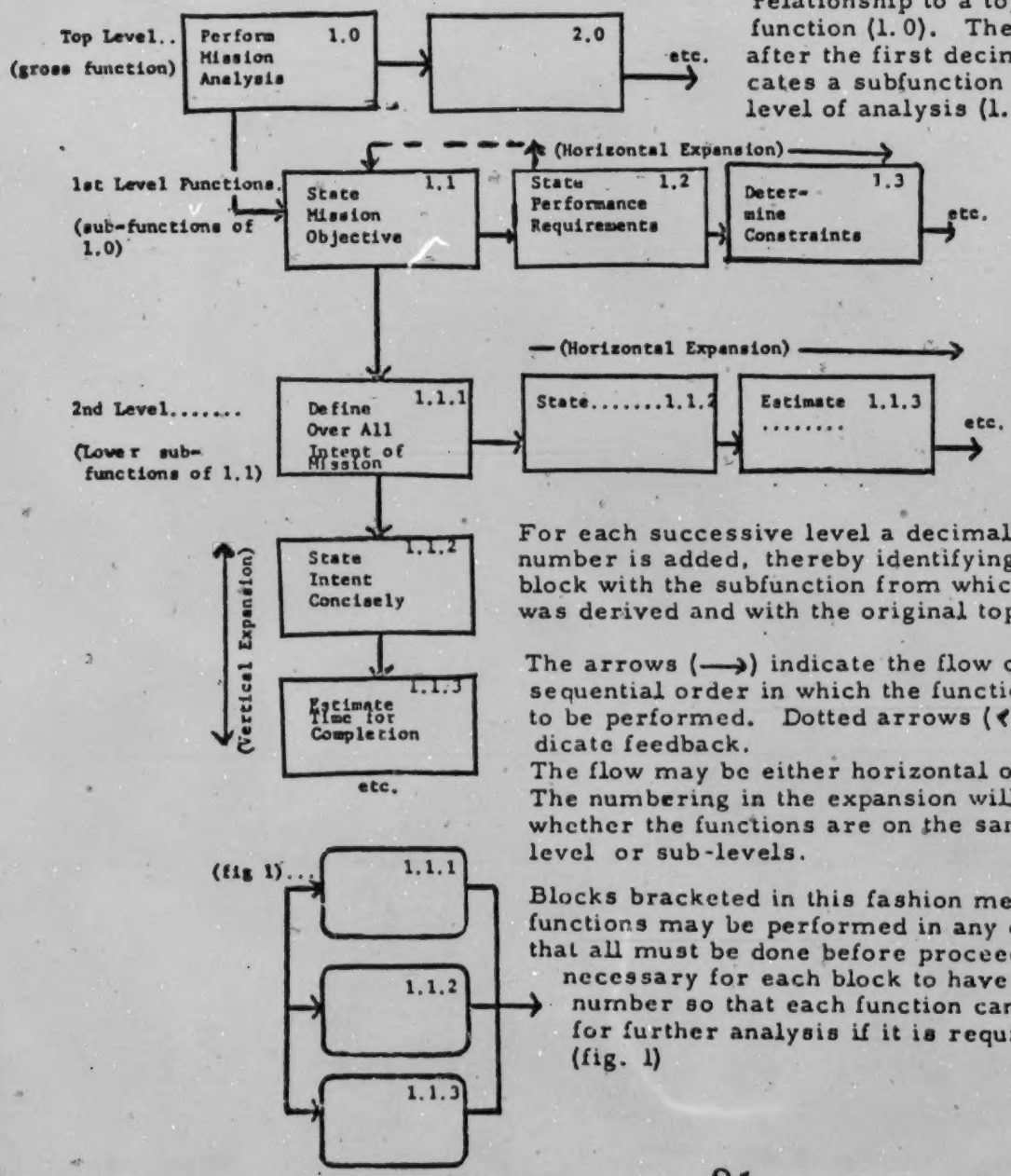
HOW TO READ THE MODELS

The models are presented as functional flow block diagrams.

Each block or rectangle presents or states an action which is to be performed and the product of that action as:



Each block contains a decimal number for identification. A gross top level function is numbered 1.0, 2.0, 3.0, etc. Each top level function is analyzed to derive sub-functions which must be performed to achieve the gross function. Each subfunction is then analyzed to derive its necessary subfunctions, and so on, through successive levels. Each lower functional level becomes more specific. To identify each successive level of analysis, a decimal place and number is added. (See example below.)

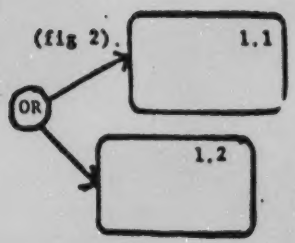


The 1st digit indicates relationship to a top level function (1.0). The number after the first decimal indicates a subfunction of the 1st level of analysis (1.1)

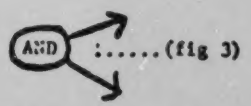
For each successive level a decimal and number is added, thereby identifying the block with the subfunction from which it was derived and with the original top level.

The arrows (⟶) indicate the flow or the sequential order in which the functions are to be performed. Dotted arrows (⟵---) indicate feedback.
The flow may be either horizontal or vertical. The numbering in the expansion will indicated whether the functions are on the same analysis level or sub-levels.

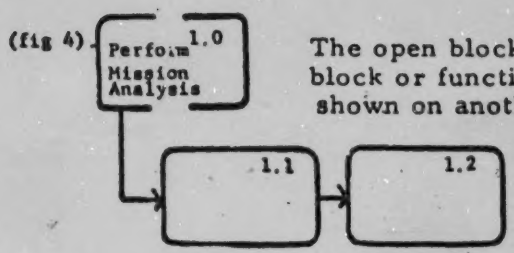
Blocks bracketed in this fashion means that the functions may be performed in any order, but that all must be done before proceeding. It is necessary for each block to have a different number so that each function can be identified for further analysis if it is required. (fig. 1)



The "OR" gate means do one or the other.



"AND" in a circle means that both functions might be performed concurrently.



The open block is a reference block. It indicates that this block or function has been removed from a flow diagram shown on another page. It is positioned, usually, at the top of a new page so that there is enough room to show a lower level analysis per formed on that function or subfunction. (fig. 5)

0.0 MISSION OBJECTIVE: By August 19, 1977, the consulting team will have delivered to the State Center Community College District (SCCCD) a Planning Process Model which, if implemented by the District, will establish a long-range, coordinated process of vocational education program planning, management and evaluation specific to the achievement of the stated performance requirements to follow.

The planning product(s) to be delivered by the consultants will include two major components: (1) (a) flow charts(s) and descriptive narrative of the recommended steps to be taken by SCCCD to achieve the given mission objective and performance requirements; and (2) a management/implementation plan for the products to be delivered in Number 1, above.

1.0 MISSION PROFILE: Establish commitment to a SCCCD District-wide vocational education planning process.

2.0 Define Voc. Ed. mission, goals, objectives at the District level

3.0 Define Voc. Ed. mission, goals, objectives for each SCCC District institution

4.0 Define functions performed at the District level to achieve the stated Voc. Ed. mission goals, objectives

5.0 Define functions performed by each SCCC District institution in the achievement of the Stated Voc. Ed. mission, goals, and objectives

6.0 Identify SCCCD Voc. Ed. mandates (Administrative and Curriculum)

7.0 Derive data required for Voc. Ed. program decision-making (needs assessment)

8.0 Identify vertical/horizontal discrepancies between/among missions, philosophies and goals, objectives, functions based on mandates and needs (Ref. 2.0-7.0)

9.0 Revise/restate SCCCD and each institution's mission, goals, objectives, functions as required based on identified needs and mandates

10.0 Define program decision-making steps for program commitments

11.0 Identify Voc. Ed. program articulation/coordination requirements

12.0 Identify qualifications of each institution for program responsibility

13.0 Select institution(s) responsible for program design

14.0 Develop specific program plans for approval

15.0 Assure feasibility of required resources to implement programs

16.0 Obtain required approvals for program implementation

17.0 Develop and implement management, coordination and evaluation sub. systems

18.0 Monitor/control program implementation

19.0 Determine program effectiveness

20.0 Determine employment effectiveness with program's design

21.0 Revise program(s) as required based on evaluation of program effectiveness and job placement

MISSION PROFILE:

The Mission Profile flow-block-diagram presented the major functions to be performed in establishing a long-range, coordinated process of vocational education program planning, management and evaluation in the State Center Community College District (SCCCD). These major functions represent the large steps, or milestones, to be achieved in meeting the Mission Objective and Performance Requirements.

Each block in the Profile is numbered, 1.0 - 21.0 for identification in further analysis and to indicate sequence of performance. The solid arrows indicate flow and sequence. Profile functions enclosed in brackets may be performed concurrently in a time shared manner or in any sequence. However, all bracketed functions must be completed before performance of following functions, as data derived will be required for use in the successive function. Dotted lines and arrows indicated feedback.

Break-outs in following sections identify the sub-functions or sub-activities which are to be performed in accomplishing the major functions identified in the Profile.

The Profile functions fall into three groupings:

Group 1: Functions 1.0 - 9.0 are concerned with identifying the focus of Vocational Education programs at the District and Institutional levels based on Missions, Goals, Objectives, Mandates and Needs.

Group 2: Functions 10.0 - 16.0 are concerned with decision-making regarding program selection, development, articulation, coordination and assignment to appropriate institutions-based on feasibility and response to mandates and needs as they related to the Objectives and functions of institutions within the District.

Group 3: Functions 17.0 - 21.0 are concerned with the implementation, management, coordination, evaluation and revision of voc. ed. programs. These functions provide the capability for continuous sensing and decision-making, and provide the means for recycling functions based on requirements for 1) improving effectiveness of programs, or 2) developing new programs in response to changing mandates or needs.

The following is a narrative description of the profile of these major functions.

1.0: Commitment. This first major function is of great importance. Use of the District-wide planning process is dependent upon the commitments of the cooperating institutions and agencies.

2.0 - 9.0: Needs Assessment. These functions, cumulatively, might be considered Needs Assessment in establishing: 1) "what is" (existing conditions), 2) "what should be" as

specified through mandates and a survey of needs, 3) discrepancies between "what is" and "what should be", and 4) change requirements. These processes are identified in the following functions:

2.0 - 5.0: Existing Commitments. The purpose of these four functions is to define formal statements which can be communicated to all agencies, including the District office and institutional Vocational Education Missions, Philosophies, Goals, Objectives and functions. The products of these functions will reflect appraisals of existing commitments outcomes, and presently performed functions.

6.0 - 7.0: Mandates and Needs. The purpose of these two functions is to establish 1) the mandated responsibilities and requirements of SCCCD as specified in Federal, State, County and local legislation, legal documents, guidelines, codes, etc.; and 2) the assessment of learners' and program needs related to employment opportunities and student interest. The product of these functions will provide the data for establishing what is legally expected of the District and institutions, and what types of programs are required to provide students with mastery skills and knowledge for employment and personal interest.

8.0 - 9.0: Requirements for Revisions: These two functions require analysis of all data produced in functions 2.0 - 7.0

to determine if the existing Missions, Goals, Objectives and functions of SCCCD at district and institutional levels match the mandates and needs identified in 6.0 and 7.0. Any discrepancies identified might require revisions or additions to the stated Goals, Objectives and functions. Additional revisions might be required to interrelate the institutional Missions, Goals, Objectives and functions with District level Mission, Goals, Objectives and functions.

10.0 - 13.0: Program Decision-Making Process. These functions identify the steps to be taken in decision-making regarding program continuation, expansion, reduction; addition, duplication; program articulation and coordination; and selection of the institution(s) responsible for program design and/or implementation. Decision-making in these functions will reflect: 1) the use of data gathered in the previous functions of needs assessment, 2) an analysis of degree to which existing programs are meeting identified needs and mandates, and 3) feasible and cost-effective use of resources within institutions and the District.

14.0 - 16.0: Program Planning. The institution selected for program responsibility will apply the planning processes identified in these major functions to design new program(s) or to revise existing ones while providing students with the skills and knowledges required for employment (previously identified through needs assessment.) Based on the plan,

the required resources for program implementation can be determined and the necessary approvals obtained.

17.0 - 20.0: Management and Evaluation of Programs. These major functions identify the steps to be taken in implementing, managing, monitoring and evaluating the planned programs. Evaluation processes are for determining not only the effectiveness of the program in achieving the plan and objectives, but also the effectiveness of fulfilling employment needs and job placements (identified in the needs assessment).

21.0: Revision Based on Evaluation. Empirical performance data from the evaluation processes provide the data for continuous decision-making regarding requirements for program revision or continuance as designed. This function closes the loop among all previous functions and provides the capability for reentry into the process model at the function most appropriate for revisions -- whether it be to re-assess needs because of changing employment opportunities, revise plans to up-grade performance, revise missions and objectives to meet new mandates or to change functions based on funding and resource allocation revisions. The feedback capability depicts the model as an on-going, dynamic process rather than a static series of steps which, once performed, would not accomodate further change.

In the following section of the discussion draft, each of the 21 major functions in the mission profile is individually analyzed. Using flow-block-diagrams, the relationships between/among the sub-functions are presented for each profile function. On the page(s) following each diagrammatic breakout of sub-functions is a narrative description of the sub-functions presented.

1.0 Establish commitment to a SCCC District-wide vocational education planning process

1.1 Identify personnel for SCCC District commitments

1.2 Identify personnel for FCC commitments

1.3 Identify personnel for Reedley College commitments

1.4 Identify personnel for VTC commitments

1.5 Determine SCCC District commitment requirements

1.6 Determine FCC commitment requirements

1.7 Determine Reedley College commitment requirements

1.8 Determine VTC commitment requirements

1.9 Identify commitment strategies to meet requirements in 1.5 through 1.8

1.10 Implement commitment strategies for Fresno City College

1.11 Implement commitment strategies for Reedley College

1.12 Implement commitment strategies for VTC

1.13 Implement SCCC District commitment strategies

1.14 List secured SCCC District commitments

1.15 List secured Fresno City College commitments

1.16 List secured Reedley College commitments

1.17 List secured VTC commitments

NARRATIVE DESCRIPTION OF 1.0

1.0 Establish Commitment to a S.C.C.C. District-Wide Voc. Ed. Planning Process

1.1 - 1.4: These four steps determine the persons from whom commitments must be obtained in adopting a District-wide voc. ed. planning process. These include personnel from the District Office, Fresno City College, Reedley College, and the Vocational Training Center.

1.5 - 1.8: Once the key personnel are identified from whom commitments must be obtained (at the District and site levels), it is then necessary to identify the requirements which must be met in order to obtain the commitments. It is quite possible that these requirements will vary from site to site, ie., what must be done to obtain FCC personnel "buy-in" on a District plan may be different from what is required at Reedly College. Thus, 1.5 - 1.8 identifies the requirements which must be met in the adoption of District-wide voc. ed. planning.

1.9: Given the commitment requirements for adopting District planning, in this step (1.9), the planners determine the strategies to be employed in gaining these commitments. Again, the strategies will likely vary from site to site as the requirements vary.

1.10 - 1.12: Now that the commitment strategies are developed, in 1.10 - 1.12 those strategies are implemented for the three local institutions.

1.13: Given implementation of the commitment strategies at the local site level, the District strategies are employed. The reason for implementing the District level strategies following the local implementation is that District strategies will likely be influenced by what is happening at the local sites.

1.14 - 1.17: If all has been successful through step 1.13, then the necessary commitments should be obtained and 1.14 - 1.17 lists these commitments secured from each site and the District Office.

2.0 Define Voc. Ed. mission, goals, objectives at the District level

2.1 Develop statement of mission of SCCCD regarding Vocational Education

2.2 Identify SCCCD administrative Voc. Ed. philosophy(ies) and goals regarding District, regional, state, federal responsibilities

2.3 Identify SCCCD instructional Voc. Ed. philosophy(ies) and goals regarding curriculum responsibilities, District, region, state, federal levels

2.4 Define all District level Vocational Education administrative objectives and performance requirements

2.5 Define all District level Vocational Education curriculum objectives and performance requirements

2.6 Define all District level Vocational Education articulation objectives and performance requirements

2.7 Define all District level Vocational Education funding objectives and performance requirements

2.8 Correlate/match objectives with mission/goals (ref. 2.1, 2.2, 2.3)

2.9 Revise/add/modify all statements, if required

2.10 Gain concurrence from District on mission, goals, and objectives

2.11 Gain concurrence from Reedley College on District's mission, goals, objectives

2.12 Gain concurrence from Fresno City College on District's mission, goals, objectives

2.13 Gain concurrence from VTC on District's mission, goals, objectives

NARRATIVE DESCRIPTION OF 2.0

2.0: Define Vocational Education Missions, Goals, Objectives at the District Level.

2.1-2.3: To provide focus and direction for any organization it is necessary to make explicit the scope and limits of the purpose of the institutions. Within these functions the focus of SCCCD is defined in the following:

a. A Mission Statement which specifies the overall intent of the District regarding Vocational Education;

b. the District-level administrative and curriculum philosophies for responsibilities to local community, County, State, and Federal agencies;

c. goals or goal hierarchies which are statements of intent related to fulfilling the District Mission and philosophies.

2.4-2.7: Once District-level Mission, Philosophies, and Goals have been defined, the intent stated in the goals can be expanded into specific measurable objectives and performance requirements which can be achieved by the District in a timely fashion to move toward fulfilling goals. Suggested areas for specifying objectives are in administration, curriculum/

programs, articulation and funding.

2.8-2.9: These two functions are checkpoints to provide the processes of correlating or matching the stated objectives and performance requirements with the pre-stated mission, philosophies and goals to be sure that all statements are internally consistent and interrelated. Revisions, additions or modifications can be made before final acceptance.

2.10-2.13: Gaining concurrence from all institutions within the District who must interrelate with the District-level Mission, Goals and Objectives is the focus of these sub-functions. The dotted feed-back lines indicate that suggestions obtained through these steps might lead back to 2.9 for further revision. Concurrence on District-level intents and objectives will provide the basis for determining interrelatedness of the institutional Goals and Objectives to be derived in 3.0.

3.0 Define Voc. Ed. mission, goals, objectives for each SCCC District institution
3.1 Determine FCC Voc. Ed. mission related to District missions
3.2 Determine Reedley College mission related to District mission
3.3 Determine VTC mission related to District mission
3.4 Define FCC philosophy and goals related to District philosophy and goals
3.5 Define Reedley College philosophy and goals related to District philosophy and goals
3.6 Define VTC philosophy and goals related to District philosophy and goals
3.7 Identify FCC Voc. Ed. legal objectives and performance requirements
3.8 Identify Reedley College Voc. Ed. legal objectives and performance requirements
3.9 Identify VTC legal objectives and performance requirements
3.10 Identify FCC Voc. Ed. curricular/program objectives and performance requirements
3.11 Identify Reedley College curricular/program objectives and performance requirements
3.12 Identify VTC curricular/program objectives and performance requirements
3.13 Identify FCC Voc. Ed. administrative objectives and performance requirements
3.14 Identify Reedley College Voc. Ed. administrative objectives and performance requirements
3.15 Identify VTC Voc. Ed. administrative objectives and performance requirements
3.16 Identify Voc. Ed. articulation objectives and performance requirements
3.17 Identify Reedley College Voc. Ed. articulation objectives and performance requirements
3.18 Identify VTC Voc. Ed. articulation objectives and performance requirements
3.19 Determine matches and mismatches among 3.16, 3.17, 3.18
3.20 Reconcile identified discrepancies
3.21 Determine District level articulation objectives and performance requirements
3.22 List FCC mission, philosophy and goals, and all objectives and performance requirements (3.1, 3.4, 3.7, 3.10, 3.13, 3.16, 3.20)
3.23 List Reedley College mission, philosophy and goals, and all objectives and performance requirements (3.2, 3.5, 3.8, 3.11, 3.14, 3.17, 3.20)
3.24 List VTC mission, philosophy and goals, and all objectives and performance requirements (3.3, 3.6, 3.9, 3.12, 3.15, 3.18, 3.20)

NARRATIVE DESCRIPTION OF 3.0

3.0 Define Voc. Ed. Mission, Goals, Objectives for Each S.C.C.C. District Institution.

3.1 - 3.3: For each of the institutions in the District, it is necessary to define individual missions against the overall District mission.

3.4 - 3.6: Against the District philosophy and goals, each institution breaks out its unique mission into voc. ed. philosophy and goals.

3.7 - 3.9: The philosophies and goals for voc. ed. at each institution are translated into corresponding legal objectives and performance requirements.

3.10 - 3.12: From the products of 3.7 - 3.9, curricular/program objectives and performance requirements are derived for each institution.

3.13 - 3.15: Given the legal and curricular/program objectives and performance requirements, for each institution, voc. ed.

3.16 - 3.18: Given 3.1 - 3.15, it is now possible to determine for each institution the unique voc. ed. articulation objectives and performance requirements.

3.19: This step looks at the individual articulation requirements from each institution and determines where they are congruent (match) and where they are non-congruent (mismatch).

3.20: Where the articulation requirements are mismatched between/among the various institutions, they are reconciled so they do match.

3.21: Given the reconciled articulation requirements from the three local institutions, it is then possible to determine the District level articulation requirements and attendant performance requirements.

3.22 - 3.24: Upon completion of 3.21, all pertinent information in function 3.0 has been identified. These last three steps (3.22 - 3.24) list these data for Fresno City College, Reedley College and the Vocational Training Center, including all objectives and performance requirements.

4.0 Define functions performed at the District level to achieve stated Voc. Ed. mission, goals, objectives

4.1 Define District-level functions performed for administrative objectives

4.2 Define District-level functions performed for curriculum coordination objectives (regional, state agencies)

4.3 Define District-level functions performed for articulation objectives between institutions within region

4.4 Define District-level functions performed for legal objectives

4.5 Identify areas of duplication, conflict, deletion, expansion (ref. 4.1, 4.2, 4.3, 4.4)

4.6 Reconcile discrepancies between classes of functions specific to District level objectives

4.7 Compile composite statement of District-level functions specific to missions, goals, objectives

NARRATIVE DESCRIPTION OF 4.0

4.0: Define Functions Performed at the District Level to Achieve Stated Vocational Education Mission, Goals, Objectives.

4.1-4.4: Achievement of objectives and performance requirements is dependent on the performance of functions designed to achieve the specific objectives. The concern of these subfunctions is to identify and define all functions presently performed on the District level related to each of the objectives stated in 2.0, and any other functions presently performed.

4.5: After all functions have been stated this subfunction provides for identification of duplicated or conflicting functions, and functions which should be expanded, added, or deleted.

4.6: All identified functions can then be matched with the objectives and performance requirements stated in Function 2.0. If there are mismatches, or discrepancies, they should be reconciled at this point.

4.7: Compilation of functions related to the specific mission, goals, and objectives in this step is the final product of Function 4.0. As a result of performing Functions 2.0 and 4.0, SCCCD will have

specified the District-level commitments for Vocational Education, as well as all functions presently performed to accomplish each commitment.

5.0 Define functions performed by each SCCC District institution in the achievement of stated Voc. Ed. mission, goals, and objectives

5.1 Identify functions being performed at FCC to achieve stated Voc. Ed. legal objectives and performance requirements

5.2 Identify functions being performed at Reedley College to achieve stated Voc. Ed. legal objectives and performance requirements

5.3 Identify functions being performed at VTC to achieve stated Voc. Ed. legal objectives and performance requirements

5.4 Identify functions being performed at FCC to achieve stated Voc. Ed. curricular/program objectives and performance requirements

5.5 Identify functions being performed at Reedley College to achieve stated Voc. Ed. curricular/program objectives and performance requirements

5.6 Identify functions being performed at VTC to achieve stated Voc. Ed. curricular/program objectives and performance requirements

5.7 Identify functions being performed at FCC to achieve Voc. Ed. administrative objectives and performance requirements

5.8 Identify functions being performed at Reedley College to achieve Voc. Ed. Administrative objectives and performance requirements

5.9 Identify functions being performed at VTC to achieve Voc. Ed. administrative objectives and performance requirements

5.10 Identify functions being performed at FCC to achieve Voc. Ed. articulation objectives and performance requirements

5.11 Identify functions being performed at Reedley College to achieve Voc. Ed. articulation objectives and performance requirements

5.12 Identify functions being performed at VTC to achieve Voc. Ed. articulation objectives and performance requirements

5.13 List FCC functions being performed to achieve all objectives and performance requirements (5.1, 5.4, 5.7, 5.10)

5.14 List Reedley College functions being performed to achieve all objectives and performance requirements (5.2, 5.5, 5.8, 5.11)

5.15 List VTC functions being performed to achieve all objectives and performance requirements (5.3, 5.6, 5.9, 5.12)

NARRATIVE DESCRIPTION OF 5.0

5.0 Define Functions Performed by Each S.C.C.C. District Institution in the Achievement of the Stated Voc. Ed. Missions, Goals, and Objectives

5.1 - 5.12: In function 3.0, all of the local missions, etc. for each institution were defined. In these steps (5.1 - 5.12), the current functions or procedures are examined for each institution. These include procedures to accomplish:

1. The stated voc. ed. legal objectives and performance requirements.
2. The stated voc. ed. curricular/program objectives and performance requirements.
3. The stated voc. ed. administrative objectives and performance requirements.

Once the procedures are identified to accomplish the above objectives and performance requirements for each institution, a clear picture is presented of what is currently being done at the local level for vocational education.

5.13 - 5.15: These steps put into written form the functions currently used at each institution to achieve all identified objectives and performance requirements. These functions (5.13 - 5.15) present a written list of the procedures identified in 5.1 - 5.12.

6.0 Identify SCCCD Voc. Ed. mandates (administrative and curriculum)

6.1 Identify current Voc. Ed. mandates

6.2 Identify current state Voc. Ed. mandates

6.3 Identify current federal Voc. Ed. mandates

6.4 Identify current regional Voc. Ed. mandates

6.5 Identify current county Voc. Ed. mandates

6.6 Identify current local Voc. Ed. mandates

6.7 Identify pending or projected Voc. Ed. mandates

6.8 Identify pending/projected state mandates

6.9 Identify pending/projected federal mandates

6.10 Identify pending/projected regional Voc. Ed. mandates

6.11 Identify pending/projected county Voc. Ed. mandates

6.12 Identify pending/projected local Voc. Ed. mandates

6.13 Match/mismatch Voc. Ed. mandates from all sources

6.14 Reconcile discrepancies/identify mandates with special/different requirements

6.15 Compile all Voc. Ed. mandates by categories

NARRATIVE DESCRIPTION OF 6.0

6.0: Identify SCCD Vocational Education Mandates.

6.1-6.6: Legal requirements, codes, or guidelines specify responsibilities of the District and influence resource availability. These sub-functions are concerned with identifying existing mandates from all sources, State, Federal, County, Regional, and local, which specify responsibilities and requirements for SCCCD.

6.7-6.12: In addition to existing mandates, identification should be made of any pending or projected mandates from all sources.

6.13-6.14: Using the data from 6.1-6.12, mandates from all sources are matched to identify similarities, differences, and discrepancies in responsibilities and requirements. Discrepancies are reconciled, and any special differences related to specific sources are identified.

6.10-6.15: As a result of all previously performed sub-functions, mandates are categorized and compiled.

7.0 Derive data required for Voc. Ed. program decision-making (needs assessment)

7.1 Assess employment opportunities for Voc. Ed. programs

7.2 Assess student interest/commitment for Voc. Ed. programs

7.3 Define existing employment focused programs

and/or

7.4 Define non-employment focused programs

7.5 Define future employment focused programs

and/or

7.6 Define future non-employment focused programs

7.7 Assess projected jobs for existing employment area

7.8 Assess projected enrollments

7.9 Define projected jobs to be available for future employment programs

7.10 Define projected future enrollments for future non-employment programs

7.11 Derive gross program feasibility indicators for existing programs

7.12 Compile data for existing future program decisions

7.13 Compile data for existing/future program decisions

NARRATIVE DESCRIPTION OF 7.0

7.0: Derive Data Required for Vocational Education Program Decision-Making (Needs Assessment).

7.1: The primary focus of Vocational Education programs is to provide learners the skills and knowledge required for employment. To identify program needs, all sources within the community are surveyed to identify employment opportunities (immediate and projected). Included in this survey should be not only data from local agencies, industries, businessmen, and educators, but also from Regional, State, and possibly Federal sources regarding existing and future trends in employment needs.

7.2: Existing and possible future student populations are surveyed to identify interest in and possible commitment to Vocational Education programs or employment areas. This will supply additional data to support employment needs and to identify other areas of student needs.

7.3-7.4: To provide further data in the needs assessment, the purpose of these two sub-functions is to identify all existing programs at all institutions within the District in two categories:

a) those which are employment focused;

b) those which are offered based on student interest

but do not lead to employment (for example, home-making, etc.)

This will provide data for matching existing programs with employment opportunities and student interest identified in 7.1 and 7.2.

It will also provide a basis for determining duplication of programs, and for identifying employment focused programs for which no jobs are available .. ... data to be used in decision-making regarding program expansion, continuation, etc.

7.5-7.6: Using data derived in 7.1-7.4,

1) employment opportunities (both present and projected) for which programs do not exist, and,

2) student interest areas for which programs are not offered are identified. Future programs in each area are defined.

7.7-7.10: In both areas of existing and defined future programs, assessment is made in these sub-functions to determine 1) the projected jobs that are will be available for students completing employment focused programs, and 2) projected enrollments of students in nonemployment focused programs. These data will be used for decision-making regarding program continuation or design of new programs.

7.11-7.12: Both of these sub-functions are concerned with deriving feasibility indicators in the two areas of existing and future programs. Included in these will be data from previous sub-functions re: employment opportunities, interests, and enrollments in addition to factors related to resource availability, existing and projected or required facilities, community growth, duplication of program offerings by other agencies in the private or public sector, etc.

7.13: Within this sub-function, all data derived is organized and compiled for use in the decision-making functions 10.0-13.0.

8.0 Identify vertical/horizontal discrepancies between/among missions, philosophies, goals, objectives, and functions based on mandates/needs (ref. 2.0 - 7.0)

8.1 List federal, state, county, regional, local mandates identified in 6.0

8.2 List identified needs from 7.0

8.3 List identified mission for SCCCD and each institution (ref. 2.0, 3.0)

8.4 List identified philosophies and goals for SCCCD and each institution (ref. 2.0, 3.0)

8.5 List identified objectives and performance requirements for SCCCD and each institution (ref. 2.0, 3.0)

8.6 List identified functions for SCCCD and each institution (ref. 4.0, 5.0)

8.7 Determine vertical and horizontal interrelatedness among missions

8.8 Determine vertical and horizontal interrelatedness among philosophies and goals

8.9 Determine vertical and horizontal interrelatedness among objectives and performance requirements

8.10 Determine vertical and horizontal inconsistencies among present functions and mandate/needs

8.11 Reconcile identified vertical/horizontal inconsistencies (8.7 - 8.10)

8.12 List reconciled vertical/horizontal inconsistencies among missions, philosophies, goals, objectives and performance requirements and functions

NARRATIVE DESCRIPTION OF 8.0

8.0 Identify vertical/horizonal discrepancies between/ among missions, philosophies and goals, objectives and performance requirements, and functions based on the mandates/needs.

8.1 - 8.2: From 6.0 and 7.0 (which are already completed), the planners look at all of the mandates (6.0) and needs (7.0) identified. These data will also be used in functions 8.7 - 8.10.

8.3 - 8.6: From completed functions 2.0, 3.0, 4.0, and 5.0, the planners again look at the identified missions, philosophies and goals, all objectives and performance requirements, and procedures used to achieve these outcomes for both the District and each institution. These data will also be used in functions 8.7 - 8.10.

8.7 - 8.10: Given the previously identified data from 8.1 - 8.6, it is now time to look at the inter-relatedness (vertical and horizontal) among all missions, philosophies and goals, objectives and performance requirements, and current procedures. The vertical dimension will match local institutions with the District level while the horizontal plane identifies the relationships among the local institutions.

8.11: Those inconsistencies that are identified from both the vertical and horizontal dimensions are now reconciled. Where there are inconsistencies, they are eliminated and brought into agreement.

8.12: This step represents the "mechanical" function of listing the reconciled missions, philosophies and goals, objectives and performance requirements, and procedures used.

9.0 Revise/restate SCCCD and each institution's mission, goals, objectives, functions as required based on identified needs and mandates

9.1 Determine mission revision requirements for District and each institution

9.2 Determine philosophy and goals revision requirements for District and each institution

9.3 Determine objectives and performance requirements revision requirements for District and each institution

9.4 Determine functions revision requirements for District and each institution

9.5 Identify revision strategies for mission, philosophy, goals, objectives, performance requirements and functions for each institution

9.6 Identify revisions strategies for mission, philosophy, goals, objectives, performance requirements and functions for SCCCD

9.7 Implement revision strategies for SCCCD and each institution

9.8 Restate missions for each institution

9.9 Restate philosophy and goals for each institution

9.10 Restate objectives and performance requirements for each institution

9.11 Restate functions for each institution

9.12 Restate SCCCD mission

9.13 Restate SCCCD philosophy and goals

9.14 Restate objectives and performance requirements for SCCCD

9.15 Restate functions for SCCCD

NARRATIVE DESCRIPTION OF 9.0

9.0 Revise/Restate S.C.C.C. District and Each Institution's Mission, Goals, Objectives, Functions as Required Based on Identified Needs and Mandates.

9.1 - 9.3: Up to this point in the profile, needs have been identified, mandates determined, and inconsistencies in outcomes and functions reconciled. In these steps, based on the data obtained, attention is once again focused on the outcomes of voc. ed. -- including missions, philosophies and goals, objectives and performance requirements. Having a clear understanding of needs, mandates, reconciled inconsistencies in outcomes and procedures will lead to a revision of the District's original voc. ed. outcomes and procedures. The first phase of this process necessites the identification of revision requirements in missions, philosophies and goals, and all objectives (legal, curricular/program, administrative, and articulation) for both the District level and the individual institutions.

9.4: Given the revision requirements for the outcomes of voc. ed. (9.1 - 9.3), it is possible to determine the revision requirements of the functions to achieve those outcomes -- for both the District and each institution.

9.5 - 9.6: Now that the revision requirements for voc. ed. outcomes and procedures are identified, it is time to identify the strategies to be used in accomplishing the revisions -- for both the individual institutions (9.5) and the District (9.6). The design of this phase suggests that each institution's strategies should be identified first with the District level following. It is possible that the institutional strategies will influence the District strategies.

9.7: This step implements the revision strategies identified in 9.5 and 9.6.

9.8 - 9.11: Once the revision strategies are implemented, restatements are derived of outcomes and functions for each institution.

9.12 - 9.15: Similarly, restatements are also derived for the District level. Again, the design suggests that each institution's revisions should be accomplished first because of the potential impact on District-level revisions.

10.0 Define program decision-making steps for program commitments

10.1 Derive program decision-making criteria for expansion of existing programs

10.2 Derive program decision-making criteria for duplication of existing programs

10.3 Derive program decision-making criteria for reduction of existing programs

10.4 Derive program decision-making criteria for elimination of existing programs

10.5 Derive program decision-making criteria for continuation of existing programs

10.6 Derive program decision-making criteria for new program designs

10.7 Compile program decision criteria specific to existing and/or future program commitments

10.8 Derive program decisions to be executed specific to existing programs (expansion, duplication, reduction, elimination)

10.9 Derive program decisions to be executed specific to future programs

10.10 Compile program decisions to be executed for existing and future programs

10.11 Rank order program decisions specific to importance for implementation (implement areas; student interest)

10.12 Rank order program decisions specific to feasibility for implementation (project jobs, student enrollment, financial responsibility)

10.13 Derive composite rank ordering of program decisions specific to importance and feasibility criteria

10.14 Match program decisions of existing/future programs (expansion, duplication, continuation, reduction, new designs)

NARRATIVE DESCRIPTION OF 10.0

10.0: Define Program Decision-Making Steps for Program Commitments.

10.1-10.6: All data produced in the previous functions 2.0-9.0 are used in these sub-functions to derive criteria. Criteria will be based on the following:

a) District and Institutional goals, missions, objectives, and functions (2.0-5.0 and 9.0-10.0);

b) mandates identified in 6.0;

c) needs for employment opportunities and student interest, degree to which existing programs meet needs, projections for future programs, and enrollment factors ... all identified in 7.0;

d) feasibility indicators defined in 7.0.

Using these data, criteria for decision-making regarding programs are derived for the following areas:

10.1: expansion of existing programs

10.2: duplication of existing programs

10.3: reduction of existing programs

10.4: elimination of existing programs

10.5: continuation of existing programs

10.6: development of new programs.

10.7: Decision-making criteria for each category specific to existing or future programs are compiled in this sub-function.

10.8-10.9: The criteria derived in 10.1-10.7 are applied in these two functions to make the decisions as to which programs in the district will be expanded, duplicated, reduced, continued, eliminated, or added (developed),

10.10: Final decisions are compiled.

10.11: Decisions made in 10.10 are rank-ordered for importance for implementation against the data derived for employment opportunities and student interest. This will provide for one variable to be used in priority setting (relevance of programs).

10.12: Another important element in priority setting is feasibility for implementation of the programs. Feasibility data includes projected jobs, enrollment (present and projected) and financial resources (present and projected). Program decisions are rank-ordered in this step against the criteria for feasibility.

10.13: The process applied in this sub-function is to assure that final decisions combine the two rankings to select programs which are not only important but feasible for implementation. Using the two rankings from 10.11 and 10.12 a composite rank ordering of program decisions is made combining the two criteria of importance and feasibility.

10.14: Having made the final decisions as to priorities for action, processes are initiated for program expansion, duplication, continuation, reduction, elimination, or new design.

11.0 Identify Voc. Ed. program articulation/coordination requirements

11.1 Identify federal articulation/coordinating requirements

11.2 Identify state articulation/coordination requirements

11.3 Identify regional articulation/coordination requirements

11.4 Identify SCCCD articulation/coordination requirements

11.5 Identify possible Voc. Ed. program duplication with outside local educational agencies (high schools, adult education, etc.)

11.6 Determine matches and mismatches among articulation/coordination requirements

11.7 Reconcile identified discrepancies

11.8 Identify Voc. Ed. program articulation/coordination requirements

11.9 List Voc. Ed. program articulation/coordination requirements

NARRATIVE DESCRIPTION OF 11.0

11.0 Identify Voc. Ed. Program Articulation/Coordination Requirements

11.1 - 11.4: In function 3.0, along with identifying other preliminary objectives and performance requirements, a "first-cut" was taken at the articulation requirements for local institutions and the District-level. In 11.1 - 11.4, attention is once again focused on the articulation/coordination requirements -- this time given the data available from functions 3.0 - 10.0. At this point in the planning process, all voc. ed. gross outcomes and procedures have been revised based upon documented needs/mandates and the decision-making process implemented for current and future program expansion, deletion, reduction, maintenance, duplication, etc. Before the assignment and development of specific voc. ed. programs begins, detailed attention is given the voc. ed. programs articulation requirements at the Federal, State, Regional and District levels.

11.5: Function 10.0 provides the decision-making process for what to do with the current and (other) voc. ed. programs. In the function (11.5), areas of program duplication are identified to determine overlap with competing voc. ed. programs offered in the greater Fresno area. These "outside" programs may influence final decisonson S.C.C.C. District voc. ed. offerings.

11.6 - 11.7: These steps take the articulation/coordination requirements identified in 11.1 - 11.4 (federal, State, regional, District) and determine where they are congruent (match) and where chey mismatch. In areas of disagreement among these requirements, the differences must be reconciled. This reconciliation is accomplished in 11.7.

11.8: Given the reconciled federal, State, regional, and District articulation/coordination requirements (11.7) and the information on competing voc. ed. programs in the Fresno area (11.5), it is possible to identify the specific voc. ed. articulation/coordination requirements for District programs.

11.9: Function 11.9 lists these articulation/coordination requirements as identifed in 11.8.

12.0 Identify qualifications of each institution for program responsibility

12.1 Identify defined mission, goals, objectives of each SCCCD institution

12.2 Define learner characteristics and employment preferences for each institution

12.3 Identify unique student/district needs present by addressed institution

12.4 Identify specific resources available at each institution

12.5 Identify unique resources available to each institution

12.6 Identify resources common to all institutions

12.7 Identify current resource utilization factor at each institution

12.8 Identify capability of each institution to expand/time-share/reorganize reduce present resources

12.9 Identify by history of success of each institution in preparing student for desired employment

12.10 Identify capabilities of administrative staff/instructional personnel to design/implement required program change

12.11 Summarize capabilities/qualification of each institution regarding proposed program responsibility

NARRATIVE DESCRIPTION FOR 12.0

12.0: Identify Qualifications of Each Institution for Program Responsibility.

12.1: Final assignment of programs to the appropriate institution(s) for implementation will be based on several variables. It is desirable to match programs with missions, goals, and objectives of the institution. As a first step, the missions, goals, and objectives of each institution are identified.

12.2-12.3: Other variables considered in program assignment are characteristics of the learners served by each institution and the employment preferences of the learners as well as the district and student needs presently addressed by each institution. These elements are defined and identified in these sub-functions.

12.4-12.8: Resources for implementation available at each institution are important to consider in assignment. Resources include personnel, facilities, equipment, support, and funding. Within these sub-functions specific resources of institutions are identified ... those which are unique, as well as those common to all. Identification of current utilization, as well as the capabilities of each institution to expand, time-share, reorganize, reduce resources, will add further information

which will shape decisions.

12.9-12.10: The success of each institution in preparing students for desired employment is identified in 12.9. The purpose of sub-function 12.10 is to identify the capabilities of administrators/staff/and instructional personnel to design and implement the required program change. Both sub-functions provide data for final decisions about assignment of responsibility for programs to institutions.

12.12: All data produced in 12.1-12.10 are summarized to be used in the following function, selection of institution responsible for program design or implementation.

13.0 Select institutions(s) responsible for program design

13.1 List qualifications of each institution for design of given Voc. Ed. programs from 12.0

13.2 Determine desires of each institution for design responsibility of given Voc. Ed. programs

13.3 Determine resource requirements for design of given Voc. Ed. programs

13.4 Determine feasibility for design responsibility from each institution

13.5 Determine resource availability for design of given Voc. Ed. programs at each institution

13.6 Identify criteria for selection of institution to be responsible for design of given Voc. Ed. programs

13.7 Match each institution against selection criteria from 3.5

13.8 Identify strategies for selection of appropriate institution to develop given Voc. Ed. program

13.9 Implement selection strategies against the selection criteria

13.10 Select institution(s) to be responsible for design of given Voc. Ed. programs

13.11 Obtain concurrence from appropriate District and institutional personnel

NARRATIVE DESCRIPTION OF 13.0

13.0 Select Institution(s) Responsible for Program Design

13.1 - 13.2: From 12.0, the qualifications of each institutions for program design were determined. In 13.1, those qualifications are listed. In order to assign program design responsibility, a factor to be considered is the desires of each institution relative to the design of given programs. 13.2 determines these desires.

13.3 - 13.5: Other variables to be considered in assigning voc. ed. program development responsibility are the resources requirements and availabilities for adequate design. A given institution, for example, may have more qualified personnel or more appropriate facilities available,etc. This function identifies these resource requirements.

13.4: This function represents a feasibility check for assigning the development of given programs to institutions. It may be feasible to develop a given program at one institution but not at another. This function checks these feasibilities.

13.6 - 13.7: Given: 1) the qualifications of each institution for program development, 2) the desires of each institution for design responsibility,

13.6 - 13.7 (continuted)

3) the program design resource requirements, and 4) the resource availabilities, it is possible to develop the objective criteria by which (an) institution(s) may be selected for voc. ed. program development. These functions determine those criteria and match each institution against them to determine which one best meets the selection criteria.

13.8 - 13.10: In these steps, the alternative selection strategies against the identified criteria are determined; one is selected and then implemented (13.8, 13.9). In 13.10, given the implementation of the selection strateg(y)ies against the criteria, an institution is assigned the program development responsibility.

13.11: The concurrence for the selection made is obtained from all appropriate District and institutional personnel.

14.0 Develop specific program plans for approval

14.1 Specify learner employment/entry requirements

14.1.1 Specify employment opportunities for which program prepares learner

14.1.2 Identify characteristics of learners for which program is being developed

14.1.3 Identify prerequisite skills/knowledge learner must have to achieve in program

14.2 Specify instructional/learning details of proposed program change

14.2.1 State specific learning objectives (mastery) to be achieved in program

14.2.2 Identify mastery knowledge/skills attitudes learners will achieve (cognitive/psychological/motor domains)

14.2.3 Identify criteria for evaluation of mastery/knowledge/skills/attitudes (re: 14.2.2) and objectives

14.2.4 Specify appropriate learning sequences to achieve mastery, objectives and criteria

14.2.5 Identify instructional/learning methods/media to be used in learning sequences

14.3 Identify the administrative details for proposed program change

14.3.1 Identify administrative functions to be performed in program modification and/or implementation

14.3.2 Identify personnel to be involved--both instructional and administrative

14.3.3 Identify support required to implement program (clerical, janitorial, printing, telephone, etc.)

14.3.4 Identify administrative sensing, reporting, evaluation, monitoring required for program implementation

14.3.5 Develop program budget and funding basis for proposed program change

14.4 Identify how program plans satisfy all approval requirements (District/regional/state/federal)

14.5 Identify benefits (instructional/administrative/articulation/costs/need reduction) of proposed program change

14.6 Produce program plan document including 14.1 - 14.5

NARRATIVE DESCRIPTION FOR 14.0

14.0: Develop Specific Program Plans for Approval.

14.1: Programs plans for design of new programs or for changes in existing programs (revision, modifications, or redesign) are focused on meeting the needs for employment and for student interest identified in the needs assessment, 7.0. The plan documents all the steps described in this function.

The sub-functions of 14.1 are concerned with specifying learner employment/entry requirements, and include the following:

14.1.1: Specifying the employment opportunities and job entry skills and knowledges for which the program prepares the learner.

14.1.2: Identification of the characteristics of learners for whom the program is being developed.

14.1.3: Identification of the prerequesite skills and knowledge the learner must have to achieve in the program.

14.2: The program plan will specify the instructional/learning details for the proposed program change as well as the criteria for evaluating learner achievement, reflecting program effectiveness. The follow-

ing sub-functions produce these details:

14.2.1: Learning Objectives are stated for mastery to be achieved in the program courses. These objectives are measurable performance objectives which contain statements of what will be achieved, how achievement is to be demonstrated, and criteria for evaluation.

14.2.2: The skills/knowledge/attitudes learners must master to achieve objectives stated in 14.2.1 are identified and documented.

14.2.3: Criteria for evaluation of mastery are developed for each skill/knowledge/attitude stated in 14.2.2.

14.2.4: Appropriate learning sequences through which the learners will acquire the mastery requirements and, thereby, achieve the objectives and meet criteria are designed in this sub-function.

14.2.5: After all learning steps have been specified, the appropriate methods and media for learning activities can be selected or alternate methods/media are identified.

The composite statements produced in 14.2 detail the instructional learning components of the program courses and represent the learning path the student will follow to achieve the mastery requirements stated for employment.

14.3: All activities stated in these sub-functions will add to the plan the complimentary components of program implementation ... the administrative/support/budget details.

14.3.1-14.3.5: Within these sub-functions, administrative functions, personnel involved in instruction and administration, and support requirements are identified. Administrative sensing, reporting, evaluation, and monitoring processes are designed, the program budget for instructional administration is developed and the funding basis or source is identified.

14.4-14.5: Upon the completion of the instructional/learning/administrative details, the plan is

analyzed to be sure that it will satisfy all approval requirements within the District, or by Regional, State, or Federal agencies. Statements might be added to identify the benefits of the plan in meeting the requirements for Instruction, Administration, Articulation, Coordination, Needs reduction and costs.

14.6: Production of the Plan document to be submitted for approval in Function 16.0 is the final step. It might be desirable to obtain preliminary approval for the draft of all steps before final copy is produced. This would allow for revisions to be included.

15.0 Assure feasibility of required resources to implement programs

15.1 Identify alternative methods/means required for program implementation

15.2 Identify current personnel, financial, facility support available at select institutions

15.3 Identify discrepancies between required and available resources for selected programs

15.4 Identify additional resources (personnel, equipment, support) available from all institutions to implement programs

15.5 Identify required resources to be procured to implement programs (not available in institution)

15.6 Define additional resources to be procured/provided for feasible program implementation

15.7 Obtain commitment to provide required resources to implement programs as designed

NARRATIVE DESCRIPTION FOR 15.0

15.0: Assure Feasibility of Required Resources to Implement Programs.

15.1-15.2: Although feasibility of resources for implementation was considered in program selection and assignment, feasibility must again be determined and assured, based on the detailed resource requirements developed in the plan.

In sub-function 15.1 alternate methods/means for program implementation are identified. Each alternative might require different resources and these required resources are identified. In 15.2, the current available resources (personnel, financial, facilities, support) available at the selected institutions are identified.

15.3: By comparing required resources with available resources discrepancies are identified, if they exist.

15.4-15.5: If, in 15.3, the requirement for additional resources for the institution was identified, then all institutions in the District might be screened to determine if the required resource(s) (personnel, equipment, support) is available within the District. If available, such resources might be used to implement the program.

15.5: Required Resources not available within the institution or the District, are identified for procurement.

15.6: Within this sub-function assessment is made of the feasibility of obtaining the additional resources which must be procured or provided to implement the program.

15.7: Commitment to provide or acquire these additional resources must be obtained before the plan can be submitted for final approval.

16.0 Obtain required approvals for program implementation

16.1 Identify required approval agencies/entities and key personnel

16.2 Determine approval requirements for each appropriate agency/entity and key personnel

16.3 Identify alternative strategies to secure required approvals from appropriate agency/entity

16.4 Determine advantages and disadvantages of each approval strategy for each appropriate agency/entity

16.5 Select approval strategies for each appropriate agency/entity

16.6 Implement approval strategies for each appropriate agency/entity

16.7 Secure federal approvals if required

16.8 Secure state approvals if required

16.9 Secure regional approvals if required

16.10 Secure District approvals

16.11 Secure institutional approvals

16.12 Secure any other required approvals

NARRATIVE DESCRIPTION OF 16.0

16.0 Obtain Required Approvals for Program Implementation

16.1: In this step, all required agencies and personnel involved in the approval of a given voc. ed. program are identified, including: 1) federal agencies and personnel, 2) State agencies and personnel, 3) regional agencies and personnel, and 4) District committees and key personnel.

16.2: Given the agencies and personnel identified in 16.1, the requirements are determined which must be met in order to gain the approvals from the appropriate agencies and their key personnel. It is anticipated that political considerations may be involved -- thus the importance of knowing the key persons in the approval process.

16.3 - 16.6: Knowing which agencies and personnel must be involved in obtaining approvals and the requirements which must be met for each agency, it is time to secure those approvals. In 16.3, alternative strategies are developed for securing the approvals (16.3), the advantages and disadvantages of each alternative identified (16.4), the appropriate strategy selected (16.5), and then implemented (16.6). This process will likely vary from agency to agency.

16.7 - 16.12: Finally, all required approvals are, in fact, obtained from those agencies involved including federal, State, regional, District, institutional (and any others).

17.0 Develop and implement management, coordination and evaluation sub-systems

17.1 Determine management subsystems requirements and mission objectives for each target program

17.2 Determine coordination subsystems requirements and mission objective for all target programs

17.3 Determine personnel allocations for each target program

17.4 Determine facilities allocations for each target program

17.5 Determine equipment allocations for each target program

17.6 Determine support services allocations for each target program

17.7 Determine financial allocations for each target program

17.8 Match/mismatch personnel allocations from all target programs

17.9 Match/mismatch facilities allocations from all target programs

17.10 Match/mismatch equipment allocations from all target programs

17.11 Match/mismatch support services allocations from all target programs

17.12 Match/mismatch financial allocations from all target programs

17.13 Reconcile/coordinate personnel allocations for all target programs

17.14 Reconcile/coordinate facilities allocations for all target programs

17.15 Reconcile/coordinate equipment allocations for all target programs

17.16 Reconcile/coordinate support services allocations for all target programs

17.17 Reconcile/coordinate financial allocations for all target programs

17.18 List coordinated resource allocations for all target programs

17.19 Determine administrator performance standards for each target program

17.20 Determine faculty performance standards for each target program

17.21 Determine support services personnel performance standards for each target program

17.22 Match/mismatch performance standards for all personnel in all target programs

17.23 Reconcile/coordinate performance standards for all target programs

17.24 List coordinated personnel performance standards for all target programs

17.25 Identify alternative management methods/means for each target program

17.26 Identify alternative coordination plans methods/means for all target programs

17.27 Determine advantages and disadvantages of each alternative management methods/means for each target program

17.28 Determine advantages and disadvantages of each alternative coordination plan methods/means for all target programs

17.29 Select management methods/means for each target program

17.30 Select coordination plan methods/means for all target programs

17.31 Match/mismatch management methods/means for each target program with coordination plan methods/means for all target programs

17.32 Reconcile/coordinate discrepancies between management methods/means for each target program and coordination plan methods/means for all target programs

17.33 List coordinated management methods/means for each target program with coordinated plan methods/means for all target programs

17.34 Develop management control charts (GANTT, PERT, etc.) for each target program

17.35 Develop coordination control charts (GANTT, PERT, etc.) for all target programs

17.36 Obtain required approvals for management and control sub-systems

17.37 Develop summative evaluation sub-system

17.38 Develop formative evaluation sub-system

17.39 Develop goal-free evaluation sub-system

17.40 Implement Vocational Education program

17.41 Implement management sub-system

17.42 Implement coordination sub-system

17.43 Implement summative evaluation sub-system

17.44 Implement formative evaluation sub-system

17.45 Implement goal-free evaluation sub-system

17.19 - 17.24 (continued):

Through a match/mismatching and reconciliation process, a list of coordinated personnel performance standards is derived (17.24).

17.25 - 17.33: Given the requirements for the management and coordination sub-systems (17.1 - 17.2), the list of coordinated resource allocations for all target voc. ed. programs (17.18), and the list of coordinated personnel performance standards (17.24) the procedures to be used in the management and coordination plans are developed. Using the logic of educational system planning, alternative strategies are identifed (17.25 - 17.26), advantages and disadvantages of each strategy determined (17.27 - 17.28), given strategies selected for implementation 17.29 - 17.30), procedures of implementation compared for matches and mismatches (17.31), discrepancies reconciled (17.32), and final management and coordination plans published (17.33).

17.34 - 17.35: In functions 17.34 and 17.35, the control charts for the management and coordination sub-systems are developed (using the techniques of GANTT, PERT, MIS, MBO, etc.). Function 17.36 obtains the required District and institutional approvals for the two plans including the control procedures selected.

NARRATIVF DESCRIPTION OF 17.0

17.0 Develop and Implement Management, Coordination and Evaluation Sub-Systems

17.1 - 17.2: Two systems to be developed in this step include the management and coordination sub-systems. These are for those voc. ed. programs which are currently offered or have been developed through the planning model. 17.1 determines the requirements for managing these programs while 17.2 identifies the coordination specifications.

17.3 - 17.18: These functions are focused on the coordination of resources to increase cost-effectiveness and duplication of resource usage. In order to arrive at the list of coordinated resource allocations for all target voc. ed. programs, (17.18), the current resource allocations are identified (17.3 - 17.7), matched and mismatched against all voc. ed. programs (17.8 - 17.12), and discrepancies reconciled (17.13 - 17.17).

17.19 - 17.24: As part of the management sub-system, performance standards are developed for District and institutional personnel. These specify the outcomes to be achieved by appropriate personnel relative to the target voc. ed. programs -- administrative, faculty, and support service.

17.37 - 17.39: A crucial part of the implementation planning for any program is development of the evaluation systems. In this planning model, three types of evaluation are proposed: 1) summative, 2) formative, and 3) goal-free. Summative evaluation is accomplished against the end-of-program objectives; formative evaluation focuses on the en-route or process objectives; and goal-free evaluation identifies, through a log, those problems which unexpectedly arose in program implementation and how these problems were resolved -- this evaluation focuses on process and has no outcome referent.

17.40 - 17.45: Finally, all of the systems developed in the planning phases are implemented including: 1) the voc. ed. programs, 2) the management sub-system, 3) the coordination sub-system, 4) the summative evaluation sub-system, 5) the formative evaluation sub-system, and 6) the goal-free evaluation sub-system.

18.0 Monitor/control program implementation

18.1 Identify administrative evaluation functions scheduled in each program plan (both formative and summative)

18.2 Identify instructional/learning evaluation checkpoint in program implementation schedule (both formative and summative

18.3 Identify functions in program plans/schedules that require monitoring for District-level decision-making

18.4 Specify type and form of data-reporting required for District-level decision-making regarding programs

18.5 Develop District-level monitoring/reporting evaluation schedule by program

18.6 Develop composite reporting/monitoring/evaluation schedule for each institution for all its Voc. Ed. programs

18.8 Develop methods/means of feed-back to programs/institutions regarding decisions made at District level for program adjustments

18.9 Disseminate schedules of evaluation check-points, procedures and format for reports to programs/institutions

18.10 Implement monitoring/evaluation/feed-back cycle

18.11 Obtain interim (formative) performance data from program/institution as scheduled (per: objectives and mastery criteria

18.12 Obtain final (summative) performance data from programs/institutions as scheduled

18.13 Obtain performance report on program implementation at District level per: negotiated agreements

18.14 Produce decision regarding program status (on track; achieving/objectives/criteria/schedules, underachievement, recommendations for adjustment

18.15 Submit feed-back to programs/institutions in sufficient time for program adjustment

NARRATIVE DESCRIPTION FOR 18.0

18.0: Monitor/Control Program Implementation

The management functions of monitoring and controlling are on-going during program implementation to provide decision-makers the data required 1) to determine whether or not planned activities are on schedule and meeting performance standards; and 2) to make provisions for adjustments and revisions which will remediate deficiencies before the entire program achievement is threatened. Decisions about the latter might require reallocation of resources or adjustment of schedules. Desirably, these functions are part of each program management plan.

If these functions and data gathering methods/means had been designed as part of the evaluation subsystem then the monitoring/controlling functions and schedules are initiated upon program implementation. If these functions have not been planned, or if it is required that District-level monitoring/control functions be superimposed on program or institutional plans then this step in the model identifies sub-functions which are performed to design and implement monitoring and control activities.

18.1-18.2: Each program plan is analyzed to identify the scheduled administrative evaluation functions and

the instructional/learning evaluations (both formative and summative).

18.3: Once these have been identified, the District-level requirements for decision-making regarding the program(s) can be identified, and monitoring/control functions specified. Included in district-level requirements might be reports to outside agencies, Regional, State or Federal, which are not required at the program or institutional level.

18.4: For each requirement/function identified, specification is made of the type of data required for decision-making from whom it is required, the form for reporting the data, and the date of delivery.

18.5-18.7: District-level Monitoring/Reporting Evaluation schedules are then made for programs. A composite schedule is produced for each institution for all Vocational Education programs for which the institution is responsible. From these schedules a District level master schedule is produced for monitoring/reporting/evaluating all institutions/programs.

18.8: Because the primary purpose of the monitoring/control functions is for decision-making regarding program status and adjustment, decisions made must be reported back to program/institution managers in sufficient time to make revisions. In addition,

results of revisions/adjustments at the program/institutional level must be "fed-back" to decision-makers. In this sub-function the "feed-back" methods and means are developed.

18.9: All schedules, procedures, and forms for reporting are disseminated to institutions/administrators/program directors.

18.10-18.14: These sub-functions identify the implementation cycle of initiating procedures, obtaining/receiving data reports, and "feeding back" decisions to appropriate implementors.

19.0 Determine program effectiveness

19.1 Identify summative objectives achieved

19.2 İdentify formative objectives achieved

19.3 Identify summative objectives not achieved

19.4 Identify formative objectives not achieved

19.5 Determine management sub-system effectiveness

19.6 Determine coordination sub-system effectiveness

19.7 Identify implementation constraints which arose and how they were handled (goal free evaluation)

19.8 Determine maintenance requirements

19.9 Determine preliminary revision requirements

NARRATIVE DESCRIPTION OF 19.0

19.0 Determine Program Effectiveness

19.1 - 19.4: Relative to the voc. ed. program(s), these four functions determine the objectives achieved and not achieved. The end-of-program objectives (summative) are examined to determine which ones were accomplished and not accomplished (19.1, 19.3), while the en-route or process objectives (formatives) are also similarly studied. These evaluations provide the data to determine success in producing the desired learner skills, knowledge, and attitudes in the voc. ed. programs.

19.5 - 19.6: Functions 19.1 - 19.4 focus on the voc. ed. programs. In 19.5 and 19.6 attention is turned to the management and coordination sub-system developed in 17.0. These systems are evaluated to determine the degree to which they accomplish their intended purposes.

19.7: This step is the goal-free evaluation. Its focus is on the problems which arose in the implementation of the voc. ed. programs and how they were resolved. In the real world, regardless of the degree to which one carefully plans, things will not always go according to schedule. The goal-free evaluation identifies these factors which "go wrong" and describes how they were handled. This is done so that the same errors will not be repeated in further implementations.

19.8 - 19.9: Based on the summative, formative, and goal-free evaluations of the voc. ed. programs plus the evaluations of the management and coordination sub-systems, the maintenance and preliminary revision requirements are determined for the voc. ed. programs. The maintenance requirements determine those aspects of the planned programs that are working well, which should be maintained as is. The revision requirements focus on areas of program weakness and specify the requirements for change based upon the data from the various evaluations.

20.0 Determine employment effectiveness with programs' design

20.1 Determine Vocational Education program graduates obtaining jobs (Vocational Education areas)

20.2 Survey employer satisfaction/dissatisfaction with graduates skills/competencies for stated jobs

20.3 Survey employer satisfaction/dissatisfaction with graduates attitudes, social behaviors for stated jobs

20.4 Survey compliance between job placement standards and Vocational Education programs

20.5 Derive composite statement of non-compliance standards between employer's hiring criteria and program designs

20.6 Define Vocational Education program redesign requirements to comply with employer hiring, job continuity and standards

NARRATIVE DESCRIPTION FOR 20.0

20.0: Determine Employment Effectiveness With Programs' Design

20.1: A second evaluation of program effectiveness is whether students completing programs are employed. Determination is made first of the number of graduates obtaining jobs.

20.2-20.4: Equally important in assessing program effectiveness is the determination of whether or not the program provided students the skills/knowledge/attitudes required to hold the job. In sub-functions 20.2 and 20.3, employers are surveyed to determine their satisfaction/dissatisfaction with the competencies of the hired students and the worker's compliance with job standards. Results of these surveys are compared with the standards of the Vocational Education program(s).

20.5-20.6: If required, composite statement of non-compliance with job standards or differences between employers' standards and program designs are derived. These statements lead to the definition of program revisions required to comply with hiring criteria and on-the-job performance standards.

These data combined with data from 19.0 will be used in 21.0 for making decisions about program revision.

21.0 Revise program(s) as required based on evaluation of effectiveness and job placement (employment)

21.1 List revision requirements from 19.7 (program)

21.2 List revision requirements from 20.6 (employment record)

21.3 Determine job market opportunities changes (current job market)

21.4 Determine projected future job market opportunities changes

21.5 Identify program(s) revision criteria

21.6 Determine program(s) revision strategies

21.7 Implement program revision strategies

21.8 Determine performance effectiveness

21.9 Identify maintenance requirements

21.10 Identify change requirements

NARRATIVE DESCRIPTION OF 21.0

21.0 Revise Program(s) as Required Based on Evaluation of Effectiveness and Job Placement (employment)

21.1 - 21.5: The purpose of these functions is to develop a list of voc. ed. program revision criteria. These criteria are formulated from four data sources: 1) the preliminary program revision requirements (19.7), 2) the revision requirements from the employment record of students (20.6), 3) the changes in the current job market, and 4) the changes in the projected future job market. From these four sources, a final list of voc. ed. program revision criteria is determined.

21.6 - 21.8: Given the program revision requirements from 21.5, in 21.6 the revision strategies are developed; in 21.7, these revision strategies are implemented; and in 21.8, their effectiveness is determined.

21.9 - 21.10: Based on the revisions in the voc. ed. programs, their implementation and evaluation, the maintenance and revision (change) requirements are again determined. With the revised program, the maintenance requirements reflect those aspects of the program which worked while the change requirements identify those program components which require even further revision.